

Appendix A - Boarding Pass Printer Paper Specifications

The following information from the Practical Automation User Manual for the ITK38 printer provides detailed information on the paper requirements. The full manual is available at www.practicalautomation.com.

6.0 PAPER INFORMATION

6.1 Paper Specifications

6.1.1 Paper Width

IBM CUSS Kiosk Standard: 8" +0/-0.04"

6.1.2 Roll Size

Roll: 8" maximum outside diameter x 1.5" inside diameter Active Surface: Located on inside of roll.

6.1.3 Recommended Papers

Manufacturer Number Type

Appleton Alpha 900-3.4 Non top coated paper (.0034 caliper) Kanzaki P-354 Non top coated paper (.0034 caliper)

6.1.4 Other Thermal Papers

Appleton Alpha 400-2.3 Non top coated paper (.0023 caliper)
Kanzaki P-310 Non top coated paper (.0024 caliper)

6.1.5 Print Activation Energy

The ITK 38 has programmable print energy level settings. These are provided to accommodate thermal paper with a broad range of thermal response characteristics. The default factory energy level setting has been set for the recommended paper types. If, however, the paper used requires, more, or less, print energy, the setting can be changed to achieve the best results. Refer to sections 10.2 and 10.5.1; 10.5.2 for instructions for setting the print energy level.

6.1.6 Roll Paper Curl Considerations

The thermally active surface of roll paper must be the inside surface of the roll. This arrangement produces a smooth, direct route of the paper into the printer, when the roll is mounted on the integral roll holder. Further, the upward curl aids in the formation of the loop for the transport-presenter or anti-jam paper deliver output devices.

6.1.7 Paper Form Type

The ITK 38 supports continuous or registration marked paper roll stock (refer to 7.1.1; 10.7.4).

6.1.7.1 Paper Supply

For variable length document printing, the paper supply is typically blank roll stock or roll stock with a continuous pre-printed background coloring, watermark, etc. For fixed sized documents, the paper supply can be blank or pre-printed, perforated, fan folded forms, or pre-printed roll stock. All fixed length forms must contain a bottom side registration mark for synchronization. Refer to section 6.1.8.5 for location details for the registration mark.

Note: Kiosk printers are set up for use with roll stock with registration marks. Please refer to Boarding Pass Printer section in this hardware specification document.

6.1.7.2 Continuous Forms

Continuous paper does not have a defined form size. It is typically blank, however, it may have top or bottom side background pre-printing. This background printing is used to enhance the appearance of the finished document.

Note: Kiosk printers are set up for use with roll stock with registration marks. Please refer to Boarding Pass Printer section in this hardware specification document.

6.1.7.3 Registration Mark Forms

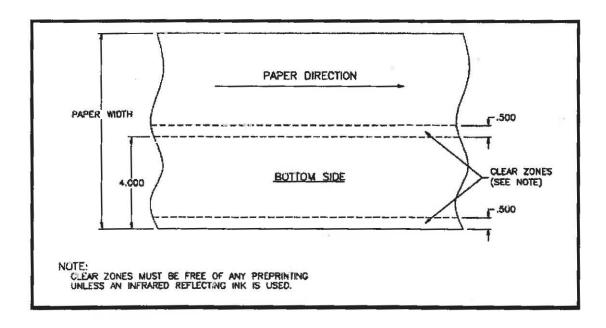
Registration marked forms have a form size defined by the distance between the marks. This marking is used to maintain the printer's mechanical synchronism with the paper stock. This type of form may also have top or bottom side pre-printing. The pre-printing may be background, however, it is more typically a form structure, onto which variable field data is printed by the ITK 38.

6.1.8 Paper Pre-printing Information

6.1.8.1 Pre-printed Paper: Bottom Side Restrictions

All versions of the ITK 38 utilize optical sensors to monitor the progress of paper through the system. Pre-printing of the paper in the area of these sensors should be avoided unless an

infrared reflecting ink is used. High contrast ratio printing, in these areas, can interfere with this monitoring. See diagram below for the locations of these restricted areas. These restrictions apply to continuous or registration marked paper.



6.1.8.2 Pre-Printed Paper: Top Side

Preprinting on the thermally active side of the paper should only be done using inks compatible with direct thermal printing. Also insure that the host application only prints (thermally) in the un-inked areas.

6.1.8.3 Fan Fold / Perforated Paper

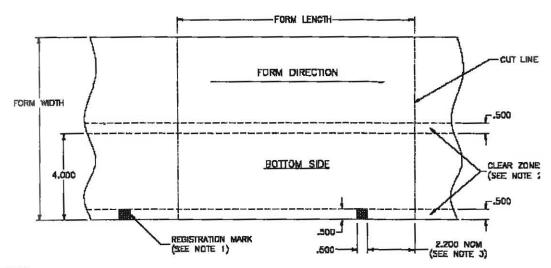
Due to the "hinge" like action that occurs with perforated stock, the design of a form used with the ITK 38 should <u>not</u> include an intermediate perforation within the first 3.5 inches of the form. Doing so could result in unreliable loading of the form into the transport presenter.

6.1.8.4 Cutting Perforated Paper

The paper/registration mark sensor <u>must</u> be adjusted to cut a minimum of 1/16" inches behind the fold/perforation. Failure to do so can cause incomplete cutting of the document and/or miss-feeding of the document through the system. When adjusted correctly this small "hinge" will be created at the trailing edge of the document by the perforation and cut.

6.1.8.5 Registration Mark Location: Bottom Side

Refer to the following diagram when specifying registration marked paper. Pay close attention to the inside/outside surfaces of the roll. The registration marks should be visible on the outside of the roll.



NOTES:

- S:
 REGISTRATION MARK: 1/5 OF LIGHT BACKGROUND
 YIELDING 5:1 CONTRAST RATIO TO INFRARED LIGHT.
 EXCEPT FOR REGISTRATION MARK, CLEAR ZONES MUST
 BE FREE OF ANY PREPRINTING UNLESS AN INFRARED
 REFLECTING INK IS USED.
 THE MARK SENSOR IS LOCATED TO GUT THE FORM
 APPROXIMATELY 2.200 AHEAD OF THE REGISTRATION MARK.
 IF PERFORATIONS ARE TO BE USED, THEY MUST BE PLACED
 .050 AHEAD OF THE CUTLINE (2.250 AHEAD OF THE MARK).

Appendix B - Bag Tag Printer Paper Specifications

The following information from the Zebra Technical Manual for the TTP2130 printer provides detailed information on the paper requirements. The full manual is available at www.zebra.com.

Section 10 - Specifications

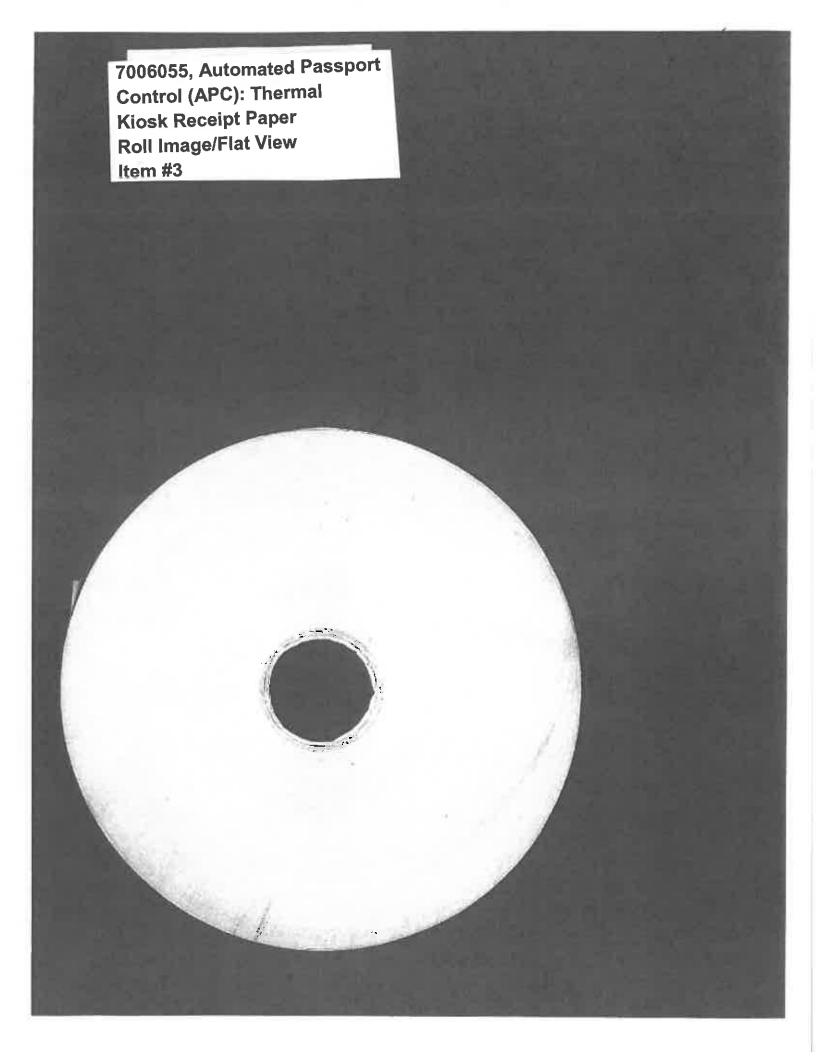
Ticket Specifications

Ticket materials	Paper, laminate, plastic, and label stock.					
Ticket widths	50.8 mm	53.98 mm	60 mm	60.3 mm	80 mm	82.5 mm
	2"	2 16"	2 %"	2,61"	3 1/6"	3 ¼"
	c	redit card		dollar bill		ISO airline ticket
Paper thickness	0,28 mm 0,	18 mm				
	11 mils 7	mils				
Ticket length	85.6 mm for ISO 7811. & up to 19" for baggage tags					
	156 mm					
	203.2 mm					
Text mode	25 cm					
	17 cm					
	Min. 40 mm, Max depends on free RAM and print width					
Driver Mode	Min. 40 mm, Max 534 mm (1.37" to 21")					
Paper weight	80 - 240 g m ² depending on width, see above					
Paper supply	Roll, fan-fold paper, or hand fed single cut					
Roll diameter	Max 250 mm. Recommended 184.2 mm (7.25")					
Spindle diameter	50 mm minimum, recommended 76.2 mm (3')					
Fanfold tickets	Straight or with corner radius					
Label work	With punched hole, or opaque space, variable length. Carrier must be at least 0.5 mm wider than the label on both sides.					

7006055, Common Use Self Service (CUSS) **Boarding Pass Printer Paper** Roll Image/Side View Item #1

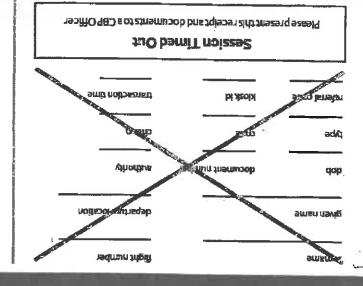
7006055, Common Use Self Service (CUSS) **Boarding Pass Printer Paper** Roll Image/Flat View Item #1

7006055, Automated Passport Control (APC): Thermal Kiosk Receipt Paper Roll Image/Side View Item #3



7006055, Automated Passport Control (APC): Thermal Kiosk Receipt Paper Ticket Image/Front View Item #3





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7006055, Automated Passport Control (APC): Thermal Kiosk Receipt Paper Ticket Image/Back View Item #3